

Database of Records of Fields of Data



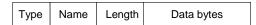
Database

Record 0
Record 1
Record 2

Record

Field 0 Field 1 Field 2

Field



Type = Byte, Word, Double Word, String, Binary, Phone Number, Bitmap Name = one of predefined names – see AEEDBFieldName

NOTE: Record could consist of only one binary field (as in J2ME)

QUALCOMM' PROPRIETARY







AEEDBFieldName (API Reference)

AEEDBFIELD_FULLNAME Field contains a full name.

AEEDBFIELD_LASTNAME Field contains a last name.

AEEDBFIELD_FIRSTNAME Field contains a first name.

AEEDBFIELD_HOME_PHONE Field contains a home telephone number.

AEEDBFIELD_WORK_PHONE Field contains a work telephone number.

AEEDBFIELD_MOBILE_PHONE Field contains a mobile telephone number.

AEEDBFIELD_FAX Field contains a fax number.
AEEDBFIELD_ADDRESS Field contains a mailing address.
AEEDBFIELD_EMAIL Field contains an email address.

AEEDBFIELD_URL Field contains a URL.

AEEDBFIELD_DATE_TIME Field contains date and time.

AEEDBFIELD_CATEGORY Field contains a category specification.

AEEDBFIELD_ALARM Field contains an alarm.

AEEDBFIELD_PREF_ID Field contains a Preference ID.

AEEDBFIELD_PREF_VER Field contains a Preference Version Number.

QUALCOMM' PROPRIETARY









To use functions in the IDBRecord Interface

- Call ISHELL_CreateInstance() if necessary to obtain an instance of the IDBMgr Interface.
- Call IDBMGR_OpenDatabase() or IDBMGR_OpenDatabaseEx() to obtain an IDatabase Interface pointer to a new or existing database.
- Call IDATABASE_CreateRecord(), IDATABASE_GetRecordByID() or IDATABASE_GetNextRecord() to obtain an IDBRecord Interface pointer for the record you are to access.

To access the record as needed

- Call IDBRECORD_Reset() and IDBRECORD_NextField() to iterate through the fields of the record and to obtain the name, data type, and length of each field. To access the contents of the current field, use one of the IDBRECORD_GetField() functions described above.
- 2. Call IDBRECORD_GetID() to obtain the record's unique ID.
- 3. Call IDBRECORD_Update() to supply new values for all the fields of the record.
- 4. Call IDBRECORD_Remove() to remove the record from the database.
- Call IDBRECORD_Release() to close the record when you have completed accessing it (if you removed the record in step 4, it is not necessary to release it here).

QUALCOMM' PROPRIETARY









Each field of a record contains its name, data type, a pointer to its contents, and the length of the contents. The record access functions in the IDBRecord Interface operate on the current field of the record. IDBRECORD_Reset() makes the first field of the record the current one, and IDBRECORD_NextField() advances the current field to next field in the record. IDBRECORD_NextField() also returns the name, data type, and length (but not the contents) of the new current field, or an end-of-record indication when all the fields of the record have been enumerated. IDBRECORD_GetField() returns a pointer to the contents of the current field and also returns the field's name, data type, and length.

The IDBRecord Interface provides some simpler functions that can be used to access a field's contents when the data type of the contents is already known:

- IDBRECORD_GetFieldWord() retrieves the contents of the current field when its
 type is word.
- IDBRECORD_GetFieldWord() retrieves the contents of the current field when its type is double-word.
- IDBRECORD_GetFieldString() retrieves the contents of the current field when its
 type is character string.

QUALCOMM' PROPRIETARY





Benefits of IDataBase



- ◆ Provides a record-oriented file structure
- ◆ Named Fields eases information exchange between applications
- **♦** Can provide better memory utilization
- ♦ For code example, see Expense Tracker

QUALCOMM' PROPRIETARY

